

# Project Leader Approval Checklist for SC4

After the project team's Quality Committee representative submits a dated and signed internal review report to the Project Leader, the Project Leader shall review the part documentation and verify the items marked on the checklist below to be correct. After the Project Leader has determined the internal review report has satisfied the reporting criteria and has completed this checklist, he or she shall date and sign this document, and send email containing the date of the sign-off, the part number and title, and the n-numbers of the approved part and any related documents to the sign-off exploder (sign-off@cme.nist.gov). The Project Leader shall send the part, a copy of this completed checklist, and the internal review report to the Working Group Convener for approval. Requirements for approving and submitting to the Secretariat documents at any stage of approval may be found at <http://www.nist.gov/sc4/www/stdsumm.htm>.

The current versions of supporting documents for SC4 part developers may be found at <http://www.nist.gov/sc4/www/necsdocs.htm>.

## PROJECT TEAM REVIEW

- ☒ 1. Members of the project team and reviewers are adequately trained to perform the roles they are assigned.
- ☒ 2. The completed internal review documents submitted by the project team to the Project Leader are dated and signed by the project team member assigned to Quality Committee and the person who performed the review.
- ☒ 3. The project team has used the task assignments from QC [Procedures for internal review](#). Provide the QC N-number of the version used in the comments field below.
  - ☐ All applicable tasks are completed for the part class as stated in table 1 of [Procedures for internal review](#).
  - Some tasks were omitted because they were unclear or did not apply. Feedback regarding improvements to the [Procedures for internal review](#) was sent to the QC exploder (qc@cme.nist.gov).
  - QC N110 used, Part Class F, Omitted points: 348-355 Integrated resources interpretation report: was not required by the time of the mapping, see comment 77; 395-399 AP usage guide: optional annex not included; 402-414 Technical discussions: optional annex not included*
- ☒ 4. The project team, in the summary report, has collected, reviewed, and recorded all SEDs that affect project development.

*All SEDS that apply have been collected earlier and are already available in used Parts/TCs. Currently available TCs or second Editions of resource parts have been used: 41.2, 42.2, 43.2, and 44.2, 45 TC1, 46 TC1, 47 TC1, 101 TC1, 105 TC2, 519 TC1*

- ☒ 5. All issues and errors identified in the internal review have been resolved or recorded.
- ☒ All issues have been resolved and are closed.
- ☐ Issues remain open and are documented in the internal review summary report.

## PART STAGE

- ☒ 6. This part is at stage:
  - ☐ Stage 6 (IS).
  - ☒ Stage 5 (FDIS).
  - ☐ Stage 4 (DIS).
  - ☐ Stage 3 (CD).
  - ☐ Stage 2 (WD) Industry Review.

## ISSUE LOG

- ☒ 7. The issue log is up-to-date for the Stage of the part:
  - ☐ at Stage 3, there is evidence of active issue resolution (open issues are permitted).
  - ☐ at Stage 4, there are no open technical issues (though there may be open editorial issues).
  - ☒ at Stage 5, there are no open issues.
- ☒ 8. The issue log is in the proper format for the stage of the part:
  - ☐ at Stage 3, the issue log is legible, easy to read, and complete.
  - ☒ At Stage 4 and Stage 5, the issue resolutions are recorded using ISO Form 13B. (See [<http://www.nist.gov/sc4/forms/form13b/>.](http://www.nist.gov/sc4/forms/form13b/))

## COPYRIGHT

*If the part is at Stage 4 or beyond, check the following items:*

- ☒ 9. The copyright symbol and statement are on the bottom of page ii. They are correct and as specified by the *Supplementary directives for the drafting and presentation of ISO 10303 (SD)*. (See 4.2.2 of the [SD](#).)
- ☒ 10. The correct copyright symbol is on page 1, and it is as specified by the *SD*. (See 4.1.4 of the [SD](#).)

*correct due to QC N151*

- ☒ 11. Each page of the document has the correct page header with the copyright symbol as specified by the SD. (See 4.1.1 of the [SD](#).)

*QC N151 used*

## COVER PAGE

- ☒ 12. The cover page has the correct format, structure, and content (*see 4.2.1, annex A of the SD*, <<http://www.nist.gov/sc4/editing/cover>>, and <[http://www.nist.gov/sc4/editing/cover/cov\\_read.htm](http://www.nist.gov/sc4/editing/cover/cov_read.htm)>.)
- ☒ 13. The N-number is present, identifies a unique document, and matches the WG document log.
  - ☐ The document is the initial publication; the 'Supersedes' field is blank.
  - ☒ The document has been released previously; the 'Supersedes' field contains the N-number of the last published version.
- ☒ 14. The date is present with the format YYYY-MM-DD. (*See* <[http://www.nist.gov/sc4/editing/cover/cov\\_read.htm](http://www.nist.gov/sc4/editing/cover/cov_read.htm)>.)
- ☒ 15. The part number and title have been verified with the SC4 Secretariat as being the same as that registered by TC 184/SC4 for the project.
- ☒ 16. The title matches the title listed by the SC4 Secretariat and registered with ISO for the project.
- ☒ 17. The ballot stage and ballot cycle are indicated. (*See* <[http://www.nist.gov/sc4/editing/cover/cov\\_read.htm](http://www.nist.gov/sc4/editing/cover/cov_read.htm)>.)
- ☒ 18. The abstract is present, concise, unambiguous, supports the Scope of the part, does not arbitrarily introduce new wording beyond that in the Scope statement.
- ☒ 19. The keywords are appropriate for searches by interested parties.
- ☒ 20. The Project Leader and Part Editor are specified and are as recorded by TC184/SC4; names, addresses, telephone/FAX numbers, and e-mail addresses are present.

*New part editor: Ullrich Pfeifer on cover page who will be changed by resolution A for Bordeaux.*
- ☒ 21. The 'Comments to Reader' field contains the required text and other text appropriate for the audience of the part during this ballot cycle. (*See* <[http://www.nist.gov/sc4/editing/cover/cov\\_read.htm](http://www.nist.gov/sc4/editing/cover/cov_read.htm)>.)
- ☒ 22. The 'Copyright Notice' field of the cover contains the required text for the ballot release Stage of the part. NOTE: WD and CD copyright statements are different than DIS and FDIS. (*See* <[http://www.nist.gov/sc4/editing/cover/cov\\_read.htm](http://www.nist.gov/sc4/editing/cover/cov_read.htm)>.)

## CONTENTS, ANNEXES, FIGURES, AND TABLES

- ☑ 23. The table of contents (TOC) starts on page ii (left-hand side of the document) as specified by the *SD*. (See 4.2.2 of the [SD](#).)  
*starts on page iii, due to QC N151*
- ☑ 24. The TOC is complete and contains the information as specified by the *SD*. (See 4.2.2 and 8.1 of the [SD](#).)
- ☑ 25. All figures and tables have a title and are presented in the format as specified by the *SD*. (See 4.5.1 and 4.5.2 of the [SD](#).)
- ☑ 26. The Index is present and starts on the page specified by the TOC as specified by the *SD*. (See 4.2. of the [SD](#).)
- ☑ 27. There are no font sizes smaller than 2.5mm in height or 8pt size appear in any of the text, diagrams, figures, or tables as specified by the *SD*. (See 4.1.3 of the [SD](#).)
- ☑ 28. All notes and examples in the text of the document appear as specified in the *SD*. (See 4.5.3 and 4.5.4 of the [SD](#).)  
*changes in QC N151 are required for parts at DIS stage or lower, Notes and Examples due to the current SD (SC4/N858)*

## FOREWORD AND INTRODUCTION

- ☑ 29. The 'Foreword' starts on a new page and the required text is as specified by the *SD*. (See 4.2.3.2 of the [SD](#).)
- ☑ 30. The list of parts documented in the 'Foreword' is current, for 10303 parts reference SOLIS at <<http://www.nist.gov/sc4/editing/step/titles>> and as specified by the *SD*. (See 4.2.3.2 of the [SD](#).) In the comment box, please enter the date the titles were downloaded from SOLIS.
- ☑ 31. The 'Introduction' starts on a new page. (See 4.2.4 of the [SD](#) and 6.1.4 of [ISO/IEC Directives Part 3:1997](#). )
- ☑ 32. The Introduction states the required knowledge-base necessary for understanding this part.
- ☑ 33. The Introduction explains the industry need for this part and does not imply a broader or narrower focus of types of information covered than specified by the Scope statement.
- ☑ 34. The Introduction states the purpose of this part and is unambiguous, concise, and understandable.
- ☑ 35. The Introduction identifies the application domain for using this part.
- ☑ 36. Relationships with other parts under SC4 control have been identified and referenced within this part as specified by the *SD*. (See 4.2.4 of the [SD](#).)

## SCOPE

- ☒ 37. The Scope for the part begins on page 1 (right-hand side of the document) and the format of the page is correct as specified by the *SD*, including the header that is different from all other page headers for the part. (See 4.1.4 and 4.3.1.1 of the [SD](#).)
- ☒ 38. The required text is as specified by the *SD*. (See 4.3.1.2., 6.2, 7.1, and 8.2 of the [SD](#).)
- ☒ 39. The Scope statement is complete and defines the extent of the subject matter as specified by the *SD* (See 4.3.1.2., 6.2, 7.1, and 8.2 of the [SD](#) and for APs 4.1 of [Guidelines for the development and approval of STEP application protocols \(APG\)](#).)
- ☒ 40. Types of data supported are easily identifiable from the Scope statement.
- ☒ 41. Discipline views that are supported are easily identifiable from the Scope statement.
- ☒ 42. Life-cycle stages supported are easily identifiable from the Scope statement.
- ☒ 43. Types of data not supported are easily identifiable from the Scope statement.
- ☒ 44. Discipline views that are not supported are easily identifiable from the Scope statement.
- ☒ 45. Life-cycle stages not supported are easily identifiable from the Scope statement.
- ☒ 46. All in-scope and out-of-scope aspects of the part are identified and properly separated as specified by the *SD*. (See 4.3.1.2 of the [SD](#).)
- ☒ 47. The Scope as stated in the original New Work Item for this part
  - ☐ has been increased. Specify (in the comment box) a date when a New Work Item will be initiated.
  - ☐ has been decreased. Specify (in the comment box) a date when a New Work Item will be initiated.
  - ☐ is affected by a SEDS report. Identify the SEDS report(s) in the comment box.
  - ☒ is unchanged.

*Scope is unchanged since AP214 CD2 and DIS version ! Scope change (without FEA) between CD1 and CD2 has been approved by CD2 ballot.*
- ☒ 48. The Working Group Convener and the SC4 Secretariat have been notified of the Scope changes by this Project Leader:
  - ☐ Yes. Specify (in the comment box) the date when notification occurred.
  - ☒ The Scope is unchanged.

*see 47.*
- ☒ 49. The Scope statement is complete, concise, unambiguous, and conveys the extent of the part in terms that are understandable to an engineering user, an application domain expert, and a software implementor.
- ☒ 50. No user requirements or definitions appear in the scope statement as specified by the *SD* and ID3. (See 4.6 of the [SD](#) and 6.6.6 of [ISO/IEC Directives Part 3:1997](#).)
- ☒ 51. All issues related to the Scope have been resolved.

## NORMATIVE REFERENCES

- ☑ 52. All standards and technical specifications referenced in normative text (including other SC4 standards) have been identified in clause 2 as specified by the *SD*. (See 4.3.1.3, 6.3, 7.2, and 8.3 of the [SD](#).)
- ☑ 53. References to normative sources are only found in the normative text of this part. No normative references appear in Notes, Examples, or informative annexes.
- ☑ 54. If this part is at Stage 4 (DIS) or higher, all ISO standards normatively referenced are also at Stage 4, or higher.

## DEFINITIONS, SYMBOLS, AND ABBREVIATIONS

- ☑ 55. All terms used in this part from other ISO standards (including TC 184/SC4 parts) are listed under a subclause for each part or standard in clause 3 as specified by the *SD*. (See 4.3.2.1 of the [SD](#).)
- ☑ 56. All definitions of terms that conflict with current definitions of the same term(s) defined in other TC 184/SC4 parts have been defined in clause 3. A Note has been included with the definition to alert the reader of the difference.
- ☑ 57. Terms specific to the application domain of this part that are not found in other publicly available standards have been identified and defined in clause 3.x, 'Other terms and definitions'.
- ☑ 58. Terms defined in 'Other terms and definitions' are unambiguous, concise, and understandable to the end-user of this part. All defined terms have **non-circular** definitions. A definition is considered circular when the term being defined appears in the definition.
- ☑ 59. All abbreviations are recorded in a subclause in clause 3 as specified by the *SD*.  
Note: Abbreviations are strongly discouraged in ISO parts. When they are permitted, document them as specified by the *SD*. (See 4.3.2.2 of the [SD](#).)

## EXPRESS

- ☑ 60. The EXPRESS schemas within this part have been successfully compiled. The compilers and versions used are specified in the comment box below. (Suggestion: use multiple compilers.)  
  
*1. ECCO Release 2.2, 2. ProSTEP CaseLib Version 5.0, 3. NIST EXPRESSO Version 2.2.1*
- ☑ 61. There is a one-to-one correspondence for each EXPRESS entity and type between the schema and the EXPRESS-G diagrams.  
  
*ensured by a tool to produce EXPRESS-G from EXPRESS code*

## AAM (ISO 10303 AP ONLY)

- ☒ 62. All inputs, controls, outputs, mechanisms (ICOMs), and activities this part defines and their definitions are sufficient for the domain expert and software implementor as specified by the *SD* and *APG*. (See 8.8.2.1.1 of the [SD](#) and 4.7 of the [APG](#).)
- ☒ 63. All out-of-scope activities and ICOMs are identified and are indicated with an asterisks as specified by the *SD*. (See 8.8.2.1.1 and 8.8.2.1.2 of the [SD](#) and 4.7 of the [APG](#).)
- ☒ 64. Each in-scope activities and ICOMs are traceable to the scope. (See clause 5 of the [APG](#).)
- ☒ 65. The entire AAM has been reviewed, is understood, and is approved by appropriate industry experts. Evidence to support this approval is documented in the AP Validation Report as required by the *APG*. (See 5.6 and 5.6.1 of the [APG](#).)

## APPLICATION REFERENCE MODEL (ISO 10303 AP ONLY)

- ☒ 66. The Introduction for this part contains a data planning model as specified by the *APG*. (See clause 4 of the [APG](#).)
- ☒ 67. All units of functionality (UoFs) are defined and have been reviewed, are understood, and are approved by appropriate industry experts as required by the *APG*. (See clauses 4 and 5 of the [APG](#).)
- ☒ 68. Each UoF has a name appropriate for its functionality and is unique across the set of UoFs and application objects (AOs) in this part as specified by the *SD* and the *APG*. (See 8.5.1 of the [SD](#) and 4.4.1 and 5.3 of the [APG](#).)
- ☒ 69. All UoFs are within the scope of this part.
- ☒ 70. UoF harmonization, with other ISO 10303 parts with similar UoF requirements and identical UoF names, is complete.
- ☐ None apply
- ☒ UOFs used from other APs are listed in the comments box below.

*UoFs FF2 (part.), T1-T2, G5 harmonized with AP224.2, UoF E1 harmonized with AP232, UoFs S1, S3-S7, PR1, E1 harmonized with AP212, UoFs S1, S3 (part.), S5-S6 (part.), G2, G3, G4, G5, G8 harmonized with AP203, UoFs P2, D1, G1 harmonized with AP201, UoFs P2, D1, D2, T1, G1, G2, G3, G8, G4, G5 harmonized with AP202, UoFs P1, G3, G8 harmonized with AP205, UoFs P1, G4, G5 harmonized with AP204*

- ☒ 71. There is a one-to-one correspondance between the set of AOs listed in the UOFs in clause 4.1 and the set of AOs defined in clause 4.2.
- ☒ 72. All application objects (AO) are defined, have been reviewed, are understood, and are approved by appropriate industry experts.
- ☒ 73. There is a one-to-one correspondence between the AOs defined in clause 4 and the ARM diagrams in annex G of this part.



- ☑ 74. Each AO name is unique across the set of 10303 application protocols and does not share its name with an attribute name or UOF name within this part. An exception to this rule is management resource subtypes. In the comment box list parts/subtype names that are shared.
- ☑ 75. No integrated resource (IR) term or definition is found in the information requirements clause except by written request from the industry review experts to which this application protocol is designed to assist.

## MAPPING TABLE (ISO 10303 AP ONLY)

- ☑ 76. Interpretation of the ARM has been performed by qualified resources. In the comment box below, please provide the names of the individuals who performed the interpretation.  
*1. Guenter Staub, PDTec, 2. Anne Wasmer, PDTec, 3. Martin Philipp, DiK*
- ☑ 77. The complete interpretation report is included with the AP Validation Report as required the APG. (See 5.4.1 and 5.6.1 of the [APG](#).)  
*No, requirement did not exist at the time of the original mapping (10/1996 - 02/1997 for CD2)*
- ☑ 78. All pruning is identified and the rationale for why such pruning is required is documented in subclause 5.2.1 Fundamental concepts and assumptions of this part as specified by the APG. (See 4.5 and 5.4 of the [APG](#).)  
*No, as a result of the short form generation out of the mapping tables and the following shortform to longform expansion the pruning is performed !*
- ☑ 79. Each application element (AE), attribute and assertion from clause 4 appears at least once in the mapping table.
- ☑ 80. Each source specified in the mapping table is accurate for the reference path stated and is according to the *Guidelines for the development of mapping tables (MTG)*, APG, and SD. (See document [MTG](#), 4.5 of the [APG](#) and 8.6 of the [SD](#).)
- ☑ 81. Each Rule in the mapping table is found in clause 5.2.n and is identified at the end of the mapping table.
- ☑ 82. Each AE has a complete entry in the 'reference path' column of the mapping table. The phrases 'NO MAPPING' or 'PARTIAL MAPPING' do not appear in the mapping table of this part.

## AIM SHORT FORM (ISO 10303 AP AND AIC ONLY)

- ☑ 83. The schema and entity information in the USE FROM statements in the short form and the 'source' and 'reference path' in the mapping table agree with the integrated resources.  
*Use of 2nd edition of Parts 41, 42, 43, and 44*
- ☑ 84. The USE FROM statements appear at the beginning of the schema and are identified to the IR from which they come as specified by the SD. (See 8.6.2 of the [SD](#).)



- ☒ 85. AIC requirements are satisfied for this part.
  - ☒ The appropriate AICs have been correctly referenced and used.
  - ☐ No AIC(s) is/are required.

*totally 15 AICs used (all at IS stage)*
- ☒ 86. New AIC(s) is/are under development as a New Work Item.
 

*No, not necessary*
- ☒ 87. The short form contains all application-specific entities, rules, and functions.
- ☒ 88. The short form has been compiled. The compilers and versions used are specified in the comment box below. (Suggestion: use multiple compilers.)
 

*1. ECCO Release 2.2 (from PDTec), 2. ProSTEP CaseLib Version 5.0, 3. NIST Espresso Version 2.2.1*

## CONFORMANCE REQUIREMENTS (ISO 10303 AP ONLY)

- ☒ 89. Each conformance class is identified in a table in clause 6 as specified by the *SD and the APG*. (See 8.7 of the [SD](#) and 4.6 and 5.5 of the [APG](#).)

## REQUIRED SUPPORTING DOCUMENTATION (ISO 10303 AP ONLY)

- ☒ 90. The validation report is complete for the stage of the part in question as required by the *APG*. (See 5.6 of the [APG](#).)
- ☒ 91. Annex L contains usage scenarios and usage tests for the part as specified by the *SD and the APG*. Note: Annex L is optional but you are strongly encouraged to include it. (See 8.8.3 of the [SD](#) and 4.7 5.6.1 of the [APG](#).)
  - ☐ Yes. The usage scenarios reflect the scope of the part.
  - ☒ No. Convener and project team have agreed that usage scenarios are not needed at this stage for this part.
- ☒ 92. Annex M contains technical discussions about this part. Note: Annex M is optional but you are strongly encouraged to include it. ( See 8.8.3.2 of the [SD](#) and 4.7 of the [APG](#).)
  - ☐ Yes. The technical discussion in annex M is concise and contains useful and clarifying information about this part.
  - ☒ No. The Convener and project team have agreed that technical discussions are not needed at this stage for this part.
- ☒ 93. The abstract test suite that corresponds to this part is appropriately complete for the part's stage:

- ☐ At Stage 3, the test purposes are in work.
- ☒ At Stage 4 and Stage 5, the abstract test suite is complete.

*ISO 10303-314 is under CD/TS ballot until 2000-06-11*

## APPROVAL

I have reviewed and verified the items on this document for:

Standard ISO 10303 Part 214 Stage FDIS WG 3 N 931

Name: Juergen Mohrmann Date: 2000-05-25

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To save a partially complete form for completion in another session:

- 1) select the "Return an editable Form" radio button,
- 2) press the save button at the bottom of the form and wait for the new form to return, then
- 3) use the File|Save option in your browser.

The saved form is editable and may be re-submitted.

To save a completed form for submission:

- 1) select the "Return a static Form" radio button,
- 2) press the save button at the bottom of the form and wait for the new form to return, then
- 3) use File|Save in your browser.

The saved form is less susceptible to modification. The saved, completed form may be emailed to the sign-off exploder (sign-off@cme.nist.gov). This step will be automated in the future.

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Send mail to the [Quality Committee](#).